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09/976,536	10/12/2001	Jason T. Griffin	1578.025 (10120-US-CIP2)	2444
54210	7590	12/19/2008	EXAMINER	
RONALD P. CASTER 31379 RIVERA ST. WINCHESTER, CA 92596-9233			NGUYEN, KIMNHUNG T	
			ART UNIT	PAPER NUMBER
			2629	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/976,536

**Applicant(s)**

GRIFFIN ET AL.

**Examiner**

KIMNHUNG NGUYEN

**Art Unit**

2629

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 44, 45, 47-81, 84, 86-104 and 106-108 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44, 45, 47-81, 84, 86-104 and 106-108 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/3508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This application has been examined. The claims 44-45, 47-81, 84, 86-104 and 106-108 are pending. The examination results are as following.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 44-45, 47-52, 56-70, 72, 75-81, 84, 86, 90-97, 104 and 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimoto (US 6,046,732) in view of Bowen et al. (US 6,046,730).

As to claim 44, Nishimoto discloses in figs. 1-3, an apparatus for a dual mode mobile communication device useable by a user, said apparatus comprising: a single, integrated device housing of a single section, said single integrated device housing having a single and continuous front surface within which are mounted a speaker, a microphone, a display and one (see col. 5, lines 13-15), and keyboard laid out in the QWERTY (see keypad 23 including numeric keypad 4, should be QWERTY laid out because Nishimoto discloses that the software keyboard are the same as the QWERTY typewriter layout which has been widely used as the key layout of keyboards attached to personal computers, see col. 3, lines 57-58, col. 8, lines 36-44), keys of keyboard laid out in the QWERTY protruding through and extending above the front

surface, said keyboard (23) being located below the display (2, see fig. 1), said speaker being located above the display and said microphone (32) also being located below the display (38A), said housing also having a first dimension and a second dimension, the first dimension defining a major axis extending between a top side surface and a bottom side surface of the housing, the second dimension defining a minor axis between a left side surface and a right side surface (because housing should have first and second dimension are X and Y axes), said top side surface and said bottom side surface being substantially parallel to each other and substantially orthogonal to said continuous single front surface and to the left and right side surfaces, said housing also having a single rear surface (see fig. 1); a voice communication interface (see audio circuit, see col. 5, lines 13-15) configured in the single, integrated device housing for operating the device in a voice mode of operation, the voice communication interface comprising the speaker, the display and the microphone; a data communication interface configured in the single, integrated device housing for operating the device in a data mode of operation (see col. 5, lines 13-15). However, Nishimoto does not disclose the speaker being located above the display and the microphone being located below the display. Bowen et al. disclose in fig. 2A, a mobile communication device (telephone handset (10)) comprising a speaker (30) is located above the display 38A, and the microphone (32) is located below the display (38A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mobile communication device comprising a speaker is located above the display, and the microphone is located below the display as taught by Bowen et al. into the mobile communication device of Nishimoto for producing the claimed invention because this

would in conventional locations on the main housing and operate in junction with speaker and microphone (see col. 5, lines 20-24).

As to claim 45, Nishimoto discloses further in fig. 1, wherein the single, integrated device housing the device has a generally rectangular shape and wherein the continuous, single front surface is substantially planar, where the keys of QWERTY style and keyboard extend through said single, continuous front surface (26, see col. 5, lines 30-34, col. 7, lines 44-53 and col. 8, lines 36-44 and discussed in claim 44).

As to claim 47, Nishimoto discloses further, wherein the side surfaces connect the front surface to the back surface (see fig. 1).

As to claim 48, Nishimoto does not disclose further, wherein the microphone is positioned on the bottom side surface of the device housing. Bowen discloses in fig. 2A and discussed in claim 44.

As to claim 49, Nishimoto does not disclose, wherein the microphone is positioned below the keyboard. Bowen discloses in fig. 2A and discussed in claim 44.

As to claim 50, is rejected as the same as claim 44.

As to claim 51, Nishimoto disclose further, wherein the display and the keyboard QWERTY style are aligned along the major axis defined through the device housing, and wherein the speaker and microphone are offset from the vertical reference line (fig. 1).

As to claim 52, Nishimoto disclose further, wherein the display (2) is rectangular (see fig. 1).

As to claim 56, Nishimoto Bowen et al. disclose further, wherein approximately half of the keys of the QWERTY keyboard are positioned on a left hand side of the device housing and approximately half of the letter keys of the keyboard are positioned on a right hand side of the device housing (fig. 1).

As to claim 57, Nishimoto disclose further, wherein the keys on the left hand side of the device housing are tilted at a negative angle with respect to a vertical reference line through the device housing and the letter keys on the right hand side of the device housing are tilted at a positive angle with respect to the vertical reference line (see fig. 1).

As to claims 58, 59, Nishimoto disclose further, wherein each key on the left hand side is tilted at a common negative angle with respect to the vertical reference line and wherein each key on the right hand side is tilted at a common positive angle with respect to the vertical reference line (see fig. 1).

As to claims 60-63, 65-67, Nishimoto discloses in fig. 1, a mobile phone 1, comprising the letter keys are oblong shaped, or oval shaped, and it would have or rectangular shaped, or diamond shaped, or arc is convex, or arc is concave because changing the shape of a key would not effect the function of a key.

As to claim 64, Nishimoto discloses further in fig. 1, wherein the keys are organized into three rows of keys, wherein each key in each row of keys is horizontally aligned across a front surface of the device housing with the other keys in the row of keys.

As to claim 68, Bowen et al. disclose further, wherein the plurality of keys are symmetrically shaped (fig. 2A).

As to claims 69, 70, Nishimoto discloses in fig. 1, a mobile phone 1, comprising the letter keys are circular shaped, and it would have a square shaped because changing the shape of a key would not affect the function of a key.

As to claim 72, Nishimoto discloses in fig. 2, a mobile phone comprising auxiliary input/output device (I/O 19) mounted along a side surface of the device housing.

As to claim 75, Nishimoto discloses further in fig. 2, comprising: a microprocessor (CPU 12), coupled to the transceiver (11), the display (2), the keyboard (3), the microphone and the speaker, for controlling the operation of the device (see col. 5, lines 1-15).

As to claim 76, Nishimoto discloses, further comprising:  
a memory store (ROM) that are executed by the microprocessor (CPU 12), the one or more application programs including at least a voice communication module (audio circuit) and a data communication module; wherein the voice communication module controls the voice communication interface when the device is in the voice mode of operation and the data communication module controls the data communication interface when the device is in the data mode of operation (see col. 5, lines 1-15).

As to claim 77, Nishimoto discloses further, wherein the one or more application programs further include a personal information manager application program (see col. 5, lines 1-15).

As to claim 78, Nishimoto discloses further comprising a transceiver (antenna 11) for sending and receiving voice communications.

As to claim 79, Nishimoto discloses further comprising a transceiver that includes at least one antenna (11, fig. 2), a transmitter and a receiver coupled to the at least one antenna, and a digital signal processor (CPU 12) for communicating with the transmitter and the receiver.

As to claim 80, Nishimoto discloses further comprising a short range RF (10) communications system (fig. 2).

As to claim 81, Nishimoto discloses further comprising a transceiver that sends and receives voice communications to and from a wireless voice network and wherein the transceiver sends and receives data communications to and from a wireless data network (fig. 2).

As to claim 84, Nishimoto discloses further wherein the single, integrated device housing includes a front surface, a rear surface, and a plurality of side surfaces that couple the front surface to the rear surface (fig. 1).

As to claim 86, Nishimoto discloses further wherein the QWERTY keyboard is symmetrically positioned from two of the side surfaces in the front surface.

As to claim 90, Nishimoto does not disclose a mode key for switching the device between the voice mode of operation and the data mode of operation. Bowen et al. disclose a mode key for switching (MMT10) the device between the voice mode of operation and the data mode of operation (see col. 5, lines 38-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a mode key for switching (MMT10) the device between the voice mode of operation and the data mode of operation as taught by Bowen et al. into the mobile communication of Nishimoto for producing the claimed invention because this would provide in



conjunction with the speaker and microphone in a video-speakerphone state via circuitry for adaptive modal and speaker acoustics (see col. 5, lines 26-30).

As to claims 91-97 are rejected as claims 44-90 above.

As to claim 104 is rejected as the same as claim 44.

As to claim 106-108 are rejected as the same as claims 44, 45, 51-57.

4. Claims 71, 89, 98-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimoto (US 6,046,732) and Bowen et al. (US 6,046,730) as applied to claim 44 above, and further in view of Hughes et al ( WO 96/04618).

Nishimoto and Bowen et al. do not disclose a serial port that can connect the device to a host computer. Hughes discloses serial port (103) that can connect the device to a host computer (80) and to load encryption key from the host computer (80, see fig.1, 3-4, 12-16; page 10, page 11, lines 1-10 and page 18, lines 3-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement serial port (103) that can connect the device to a host computer (80) and to load encryption key from the host computer as taught by Hughes et al. into the mobile communication of Nishimoto and Bowen et al. for producing the claimed invention because this would a software initialization for key information, dynamic customer dependent information and host initiated updates (see page 10, lines 9-11).

5. Claims 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimoto (US 6,046,732) and Bowen et al. as applied to claim 44 above, and further in view of Lookofsky (US 5,416,730).

As to claims 53-55, Nishimoto and Bowen et al. as modified fail to point out the QWERTY keyboard having a NUM Lock, a CAP lock and function keys Lookofsky teaches a QWERTY keyboard arrangement having a CAP lock, and function keys (see figures 5-6 and column 6, lines 52-58). It would have been obvious to have QWERTY keyboard having a NUM Lock, a CAP lock and function keys as taught by Lookofsky into the mobile communication having QWERTY keyboard of Nishimoto and Bowen et al. because this would provide a dual function keys for the user.

6. Claims 73, 74, 87, 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimoto and Bowen et al. as applied to claim a above, and further in view of Grant (US 5,500,643).

As to claims 73, 74, as can be seen in figure 1, Grant shows an auxiliary input/output (46) as a thumbwheel (col. 3, lines 64-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Grant having a thumbwheel to Lieberman's device so as to simplify inputting data.

As to claim 74, the LED input/output is broad enough that the LED would have been part of the input/output device which as well known to be existed in the QWERTY keyboard.

As to claims 87-88, directed to thumbwheel, which as can be seen above, taught by Grant. Having the thumbwheel in the side or front surface would be obvious to a person of ordinary skill in the art, based on the design of the device and the required characteristics.

***Response to Arguments***

7. Applicant's arguments with respect to claims 44-45, 47-81, 84, 86-104 and 106-108 filed 9/11/08 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMNHUNG NGUYEN whose telephone number is (571)272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimnhung Nguyen/  
Examiner, Art Unit 2629

/Richard Hjerpe/

**Supervisory Patent Examiner, Art Unit 2629**